Hill Air Force Base, Utah

Final

Environmental Assessment: Proposed Demolition of 12 Structures, Hill Air Force Base, Utah

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14. ABSTRACT

Hill AFB proposes to accommodate current United States Air Force (USAF) missions by demolishing 12 structures on Hill AFB. All 12 buildings have both aged and deteriorated to the point they cannot be economically repaired or remodeled. Seven of the 12 buildings would be demolished without being replaced in kind. For five of the 12 buildings, military construction (MILCON) projects would provide new facilities to house the activities that are or were being performed in the deteriorated structures. The proposed action and the no action alternative were both considered in detail. Following the demolition phase, backfill and revegetation operations would prevent erosion of the site. The proposed action could be implemented with minor air emissions of short term duration. During demolition activities, solid wastes and wastes containing asbestos, lead-based paint, PCBs, mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly. The proposed demolition projects would have an adverse effect on cultural resources, but mitigation efforts would be conducted according to an existing MOA with the Utah SHPO. No long-term environmental impacts are expected from either the proposed action or the no action alternative.

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Final

Environmental Assessment (EA): Proposed Demolition of 12 Structures, Hill Air Force Base, Utah

Contract F42620-00-D0028, Delivery Order #0016

Department of the Air Force
Air Force Materiel Command
Design Engineering Support Program (DESP)
Hill Air Force Base, Utah 84056

August 22, 2005

Prepared in accordance with the Department of the Air Force Environmental Impact Analysis Process (EIAP) 32 CFR Part 989, Effective July 6, 1999, which implements the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ) regulations.

EXECUTIVE SUMMARY

Purpose and Need

The purpose of the proposed action is to accommodate current United States Air Force (USAF) missions by demolishing 12 structures at Hill Air Force Base (AFB). All 12 buildings have both aged and deteriorated to the point they cannot be economically repaired or remodeled. Seven of the 12 buildings would be demolished without being replaced in kind. For five of the 12 buildings, military construction (MILCON) projects would provide new facilities to house the activities that are or were being performed in the deteriorated structures.

The demands on Hill AFB are growing each year as the base performs its mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services. The proposed action is needed to provide easily accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed.

Scope of the Environmental Review

No species of plants or animals listed as endangered, threatened, or sensitive by state or federal agencies were observed in or around the proposed excavation area, and no suitable habitat for any such species is likely to be disturbed by the project. During the demolition activities, solid and/or hazardous wastes would be generated and would require proper management and coordination with state regulatory agencies. Air emissions would be produced by heavy equipment. Contamination of shallow soil could exist beneath or adjacent to the structures undergoing demolition and utility removal. Some of the buildings proposed for demolition are historic structures, and have been determined eligible for inclusion in the *National Register of Historic Places* (NRHP).

The issues that were identified and analyzed in the document are: air quality; solid and hazardous wastes; cultural resources; and physical environment (surface soils). Environmental effects of the no action alternative were also considered.

Selection Criteria

The action to be taken should:

- support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services;
- not violate any provisions of the *National Historic Preservation Act* ; and
- be protective of facilities, human health, and the environment.

Proposed Action

Proposed Action - The proposed action includes all work necessary to demolish 12 structures at Hill AFB. The proposed demolition activities would include: demolishing the structures; removing any asbestos and/or lead based paint that is present; removing slabs, foundations, and footings; removing any petroleum storage tanks associated with the structures; removing and capping buried utilities; backfilling to original grade; and restoring vegetation to prevent future erosion. The depth of excavation required is approximately 10 feet below ground surface (bgs).

No Action Alternative – Under the no action alternative, 12 structures that are no longer able to support USAF mission requirements would continue to occupy accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed. The no action alternative does not meet the selection criteria to support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services; or to be protective of human health.

Results of the Environmental Assessment

The proposed action and the no action alternative were both considered in detail. Demolition activities would comply with conditions of a stormwater permit. Following the demolition phase, backfill and revegetation operations would prevent erosion of the site. The proposed action could be implemented with minor air emissions of short term duration. During demolition activities, solid wastes and wastes containing asbestos, lead-based paint, polychlorinated biphenyls (PCBs), mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly. The proposed demolition projects would have an adverse effect on cultural resources, but mitigation efforts would be conducted according to an existing memorandum of agreement (MOA) with the Utah State Historic Preservation Office (SHPO).

Under the no action alternative, current conditions would continue. Opportunities to remove hazardous building components and investigate potentially contaminated shallow soils would not be realized, and structures that are no longer able to support USAF mission requirements would continue to occupy accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed.

No long-term environmental impacts are expected from either the proposed action or the no action alternative No cumulative environmental impacts are expected from either the proposed action or the no action alternative.

COMPARISON OF ALTERNATIVES

Issue	**Proposed Action** **Demolish 12 Structures at Hill AFB**	**No Action** **Do Not Demolish the Structures**
Air Quality	Temporary demolition-related emissions. Asbestos abatement would be performed wherever indicated.	No impact.
Solid and Hazardous Wastes	Solid wastes and wastes containing asbestos, lead-based paint, PCBs, mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly.	Opportunities to remove hazardous building components would not be realized.
Cultural Resources	For four structures, mitigation efforts would be conducted according to an existing MOA with the Utah SHPO.	No impact.
Surface Soils	Demolition-related erosion control measures and stormwater permits may be required - the potential for shallow soil contamination at three sites would be investigated, and remediated if necessary.	Opportunities to investigate potentially contaminated shallow soils would not be realized.

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LIST OF ACRONYMS AND CHEMICAL TERMS

AFB	Air Force Base
AFI	Air Force Instruction
AMA	Air Materiel Area
AST	Above-ground Storage Tank
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DAQ	Division of Air Quality (State of Utah)
DRMO	Defense Reutilization and Marketing Office
DWQ	Division of Water Quality (State of Utah)
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EPA	Environmental Protection Agency (United States)
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutant
IRP	Installation Restoration Program
MILCON	Military Construction
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHRP	National Register of Historic Places
NO_x	Oxides of Nitrogen
O_3	Ozone
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PM-10	Particulates Smaller Than 10 Microns in Diameter
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Office (State of Utah)
SO_2	Sulfur Dioxide
TSCA	Toxic Substances Control Act
UAC	Utah Administrative Code
USAF	United States Air Force
UST	Underground Storage Tank
VOC	Volatile Organic Compound
XRF	X-ray Fluorescence

1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

Hill Air Force Base (AFB) is an air logistics center that maintains aircraft, missiles, and munitions for the United States Air Force (USAF). In support of that mission, Hill AFB: provides worldwide engineering and logistics management for the F-16 Fighting Falcon and A-10 Thunderbolt; accomplishes depot repair, modification, and maintenance of the F-16, A-10 Thunderbolt, and C-130 Hercules aircraft; and overhauls and repairs landing gear, wheels and brakes for military aircraft, rocket motors, air munitions, guided bombs, photonics equipment, training devices, avionics, instruments, hydraulics, software, and other aerospace related components.

This document addresses proposed demolition activities related to facilities that are no longer able to support USAF mission requirements.

1.2 Purpose and Need

The purpose of the proposed action is to accommodate current USAF missions by demolishing 12 structures at Hill AFB (Table 1). All 12 buildings have both aged and deteriorated to the point they cannot be economically repaired or remodeled. Seven of the 12 buildings would be demolished without being replaced in kind. For five of the 12 buildings, military construction (MILCON) projects would provide new facilities to house the activities that are or were being performed in the deteriorated structures.

Table 1: List of Buildings Proposed for Demolition

Building	Reason for Demolition
9 (Older Southern Portion)	Deteriorated, and will be replaced
11	Deteriorated, and will be replaced
308 (Older Southern Portion)	Deteriorated beyond economical repair
405	Deteriorated beyond economical repair
697	Deteriorated beyond economical repair
752	Deteriorated, and will be replaced
800	Deteriorated beyond economical repair
820	Deteriorated beyond economical repair
830	Deteriorated, and will be replaced
840	Deteriorated, and will be replaced

1146	Deteriorated beyond economical repair
1147	Deteriorated beyond economical repair

Eleven of these 12 buildings have already been approved for demolition by the Hill AFB Facilities Board. It is expected that Building 752 will be added to the approved demolition list in the near future.

The demands on Hill AFB are growing each year as the base performs its mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services. The proposed action is needed to provide easily accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed.

1.3 Location of the Proposed Action

Hill AFB is located approximately twenty five miles north of downtown Salt Lake City and seven miles south of downtown Ogden, Utah (Figure 1). Hill AFB is surrounded by several communities: Roy and Riverdale to the north; South Weber to the northeast; Layton to the south; and Clearfield, Sunset, and Clinton to the west. The base lies primarily in northern Davis County with a small portion located in southern Weber County.

The 12 buildings proposed for demolition are located on Hill AFB as shown in Figure 2.

1.4 Scope of the Environmental Review and Anticipated Environmental Issues

The scope of this environmental review is to analyze environmental concerns related to demolishing 12 structures at Hill AFB.

During demolition activities, solid and/or hazardous wastes (such as asbestos; lead; mercury; polychlorinated biphenyls [PCBs]; asphalt; petroleum products; contaminated soil) would be generated and would require proper management and coordination with state regulatory agencies. Additional hazardous wastes could be generated if a spill of fuel, lubricants, or demolition-related chemicals were to occur. No industrial wastewater discharges are anticipated as a result of the proposed action. Air emissions would be produced by heavy equipment.

During demolition activities, soil would be disturbed to remove and backfill around the existing slabs; foundations; footings; exterior concrete and asphalt surfaces; any petroleum storage tanks associated with the structures; and buried utilities. For each of the 12 buildings to be demolished, square footage of soil to be disturbed would be considered on a per-building basis; some of the demolition sites would exceed one acre in size. Any site exceeding one acre would require a stormwater pollution prevention plan.

Contamination of shallow soil could exist beneath or adjacent to the structures undergoing demolition and utility removal.

No species of plants or animals listed as threatened or endangered are known to occur on Hill AFB (Hill AFB 2005a; Hill AFB 2005b), and no suitable habitat for any such species is likely to be disturbed by the project. All of the proposed activities would occur in already-disturbed areas of Hill AFB.

Some of the buildings proposed for demolition are historic structures, and have been determined eligible for inclusion in the *National Register of Historic Places* (NRHP).

The issues that have been identified for detailed consideration and are therefore presented in Sections 3 and 4 are: air quality; solid and hazardous wastes; cultural resources (defined as archaeological, architectural, or traditional cultural properties); and physical environment (surface soils). Environmental effects of the proposed action and the no action alternative were both considered in detail.

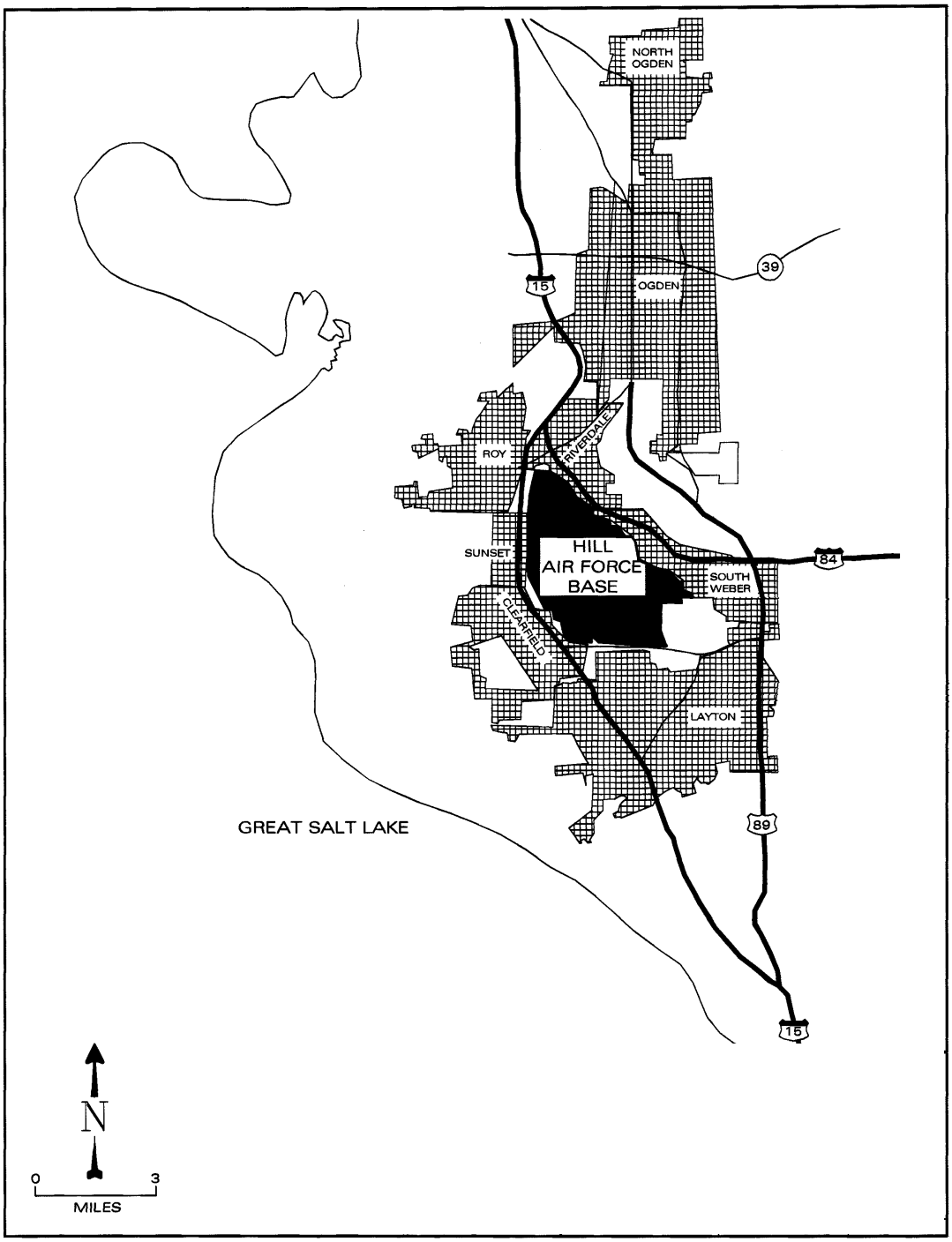

Figure 1: Hill AFB Location Map

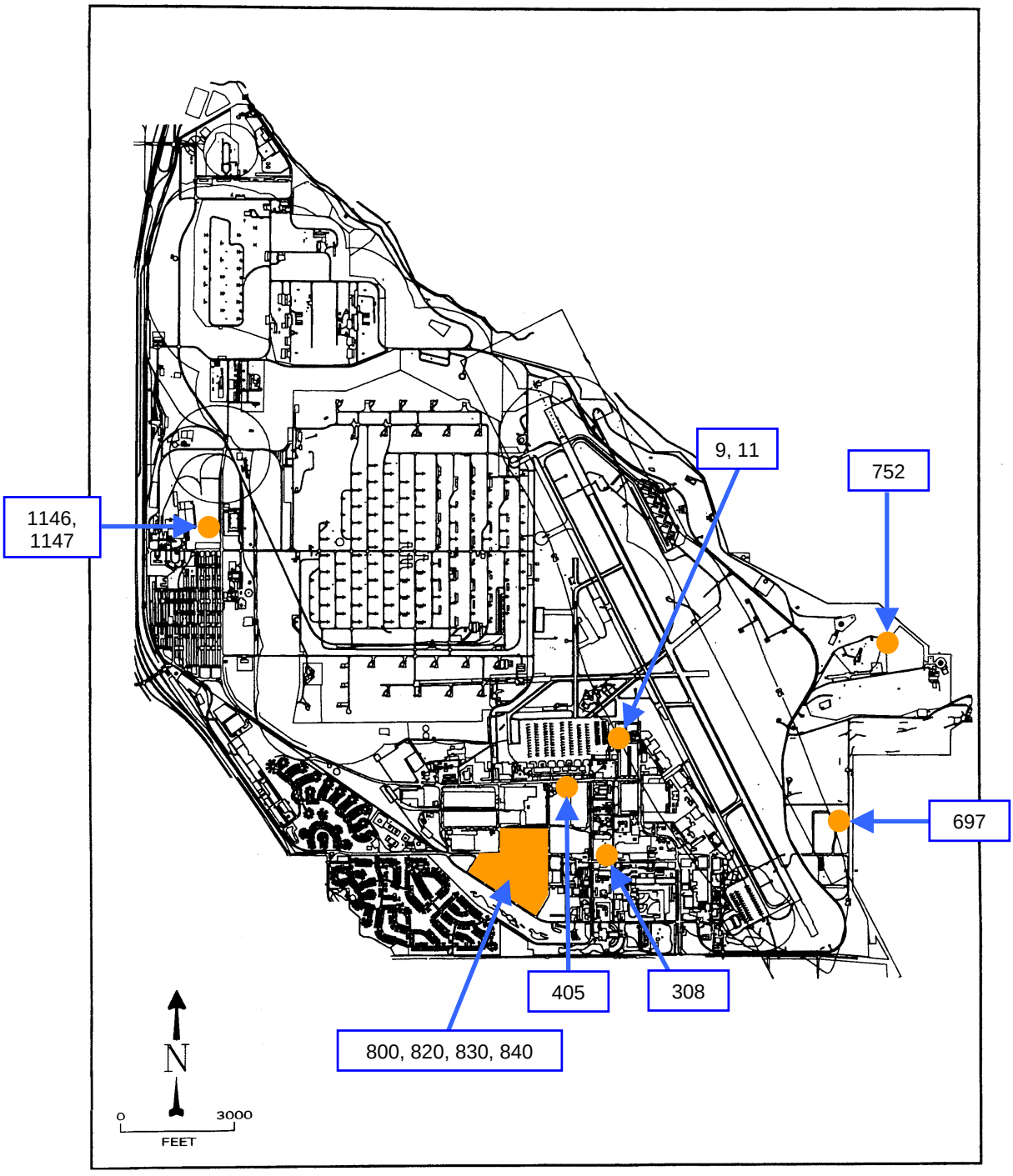

Figure 2: Locations of the Proposed Building Demolitions

1.5 Applicable Regulations and Permits

USAF activities are mandated to comply with conditions of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality's regulations for implementing the procedural provisions of NEPA (40 CFR 1500-1508), and USAF-specific requirements contained in 32 CFR Part 989, *Environmental Impact Analysis Process* (EIAP).

During each demolition project, Hill AFB contractors would follow safety guidelines of the Occupational Safety and Health Administration (OSHA) as presented in the *Code of Federal Regulations* (CFR). Should any Hill AFB employees participate in the proposed action, they would comply with relevant Air Force occupational safety and health standards.

Each demolition site that would disturb an area greater than or equal to one acre would be covered under Utah's general construction permit rule for stormwater compliance. Coverage under this permit must be obtained and erosion and sediment controls must be installed according to a stormwater pollution prevention plan prior to initiating any grading activities. If such a site would disturb less than five acres, it might qualify for a waiver from the permit based on low potential for erosion at the site. The waiver only applies to sites where work begins and site stabilization is completed between January and April of the same year. A certification form must be filled out and sent to the Utah Division of Water Quality (DWQ) to obtain this wavier. Stormwater compliance is discussed in Sections 3 and 4 of this document (see the discussion of erosion of surface soil).

In Utah, asbestos abatement projects must be conducted in accordance with the *Utah Administrative Code* (UAC), Section R307-801. Air emissions generated by the proposed action must be addressed in accordance with Utah's fugitive emissions and fugitive dust rules (*Utah Administrative Code* [UAC] Section R307-309) and Utah's *State Implementation Plan* (UAC Section R307-110), which complies with the Clean Air Act's *General Conformity Rule*, Section 176 (c). A conformity analysis was conducted for this proposed action as specified by "*Determining Conformity of Federal Actions to State or Federal Implementation Plans*," 40 CFR 93.154. Specific discussions for air emissions and potential impacts related to the proposed action are presented in Sections 3 and 4 of this document.

The proposed demolition activities would be expected to generate wastes that are regulated by the Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act (TSCA), or similar law. Hazardous wastes at Hill AFB are routinely and properly handled in accordance with RCRA regulations, Utah hazardous waste management regulations contained in the UAC Section R315, and the *Hill AFB Hazardous Waste Management Plan*. These regulations control hazardous waste from its origin and storage to ultimate treatment, and/or disposal. In Utah, the above regulations are enforced by the Utah Division of Solid and Hazardous Waste. The potential for

generation of hazardous waste during the proposed demolition activities is discussed in Sections 3 and 4 of this document.

The Hill AFB Installation Restoration Program (IRP) has completed base wide remedial investigations according to the conditions of a federal facility agreement and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Specific discussions for ongoing CERCLA activities and requirements related to the proposed action are presented in Sections 3 and 4 of this document.

A comprehensive cultural resources inventory was conducted for buildings exceeding 50 years in age, in accordance with the *National Historic Preservation Act* and Air Force Instruction (AFI) 32-7065. The inventory also took into account buildings that were not yet 50 years old but that may be eligible for their role during the Cold War. Four of the buildings proposed for demolition are eligible cultural resources (architectural) and demolition is an adverse effect that must be mitigated (see Sections 3 and 4 of this document). If additional suspected or actual cultural resources should be observed during demolition activities, work in the immediate vicinity would stop, and the Hill AFB cultural resources manager would implement inadvertent discovery procedures in accordance with the Hill AFB *Integrated Cultural Resources Management Plan*.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

This section describes selection criteria, the proposed action, and the no action alternative.

2.1 Selection Criteria

As discussed in Sections 1.1 and 1.2, the structures that are proposed for demolition are no longer able to support USAF mission requirements. All 12 buildings have both aged and deteriorated to the point they cannot be economically repaired or remodeled.

Due to these considerations, the following selection criteria were established. The action to be taken should:

- support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services;
- not violate any provisions of the *National Historic Preservation Act* ; and
- be protective of facilities, human health, and the environment.

2.2 Proposed Action: Demolish 12 Structures

The proposed action includes all work necessary to demolish 12 structures at Hill AFB.

The proposed demolition activities would include: demolishing the structures; removing any asbestos and/or lead based paint that is present; removing slabs, foundations, and footings; removing any petroleum storage tanks associated with the structures; removing and capping buried utilities; backfilling to original grade; and restoring vegetation to prevent future erosion. The depth of excavation required is approximately 10 feet below ground surface (bgs).

The environmental impacts of the proposed action are summarized in Section 4.5 of this document, and are discussed at greater length throughout Section 4 of this document.

2.3 No Action Alternative: Do Not Demolish the Structures

The no action alternative does not meet the selection criteria to support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services; or to be protective of human health. However, the framework of an environmental assessment requires that the no action alternative must be considered even if it does not meet all of the selection criteria.

Under the no action alternative, 12 structures that are no longer able to support USAF mission requirements would continue to occupy accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed.

The environmental impacts of the no action alternative are summarized in Section 4.5 of this document, and are discussed at greater length throughout Section 4 of this document.

3.0 EXISTING ENVIRONMENT

3.1 Air Quality

Hill AFB is located in Davis and Weber Counties, Utah. Neither county is in complete attainment status with federal clean air standards (Figure 4). Nonattainment areas fail to meet national ambient air quality standards (NAAQS) for one or more of the criteria pollutants: oxides of nitrogen (NO_x), sulfur dioxide (SO_2), ozone (O_3), particulates less than 10 microns in diameter (PM-10), carbon monoxide (CO), and lead. Davis County was upgraded from an ozone non-attainment area to a maintenance area, effective 1997. Current status according to the Utah Division of Air Quality (DAQ 2003) for the City of Ogden in Weber County (approximately seven miles north of the proposed action) is designation as a non-attainment area for PM-10 and a maintenance area for CO.

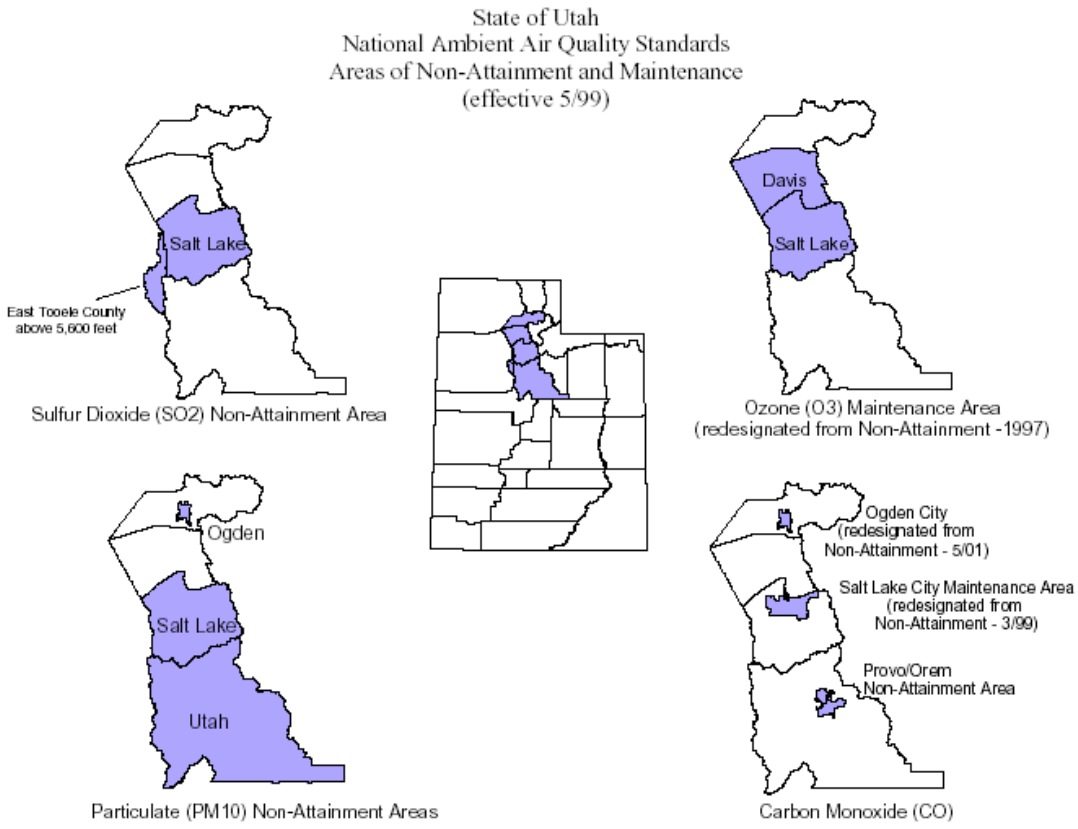

Figure 3: State of Utah National Ambient Air Quality Standards, Areas of Non-Attainment and Maintenance (Effective 5/99)

The current air quality trend at Hill AFB is one of controlling emissions as Hill AFB managers implement programs to eliminate ozone-depleting substances, limit use of volatile organic compounds (VOCs), install VOC emission control equipment for painting operations, switch to lower vapor pressure solvents and aircraft fuel, convert internal combustion engines from gasoline and diesel to natural gas, and improve the capture of particulates during painting and abrasive blasting operations (in compliance with the base's Title V air quality permit).

3.2 Solid and Hazardous Wastes

In general, hazardous wastes include substances that, because of their concentration, physical, chemical, or other characteristics, may present substantial danger to public health or welfare or to the environment when released into the environment or otherwise improperly managed. Hazardous wastes generated at Hill AFB are managed as specified in the *Hill AFB Hazardous Waste Management Plan* with oversight by personnel from the Environmental Management Directorate and the Defense Reutilization and Marketing Office. Hazardous wastes at Hill AFB are properly stored during characterization, and then manifested and transported off site for treatment and/or disposal.

Petroleum storage tanks are present at Buildings 9, 405, 752, and 800. Under existing conditions, any asbestos, lead, mercury, PCBs, petroleum products, and asphalt associated with these 12 structures is not being disturbed and would be allowed to remain in place without regulatory or environmental analysis until such time as demolition activities are about to begin. Contaminated soils are discussed in Section 3.4.

3.3 Cultural Resources

A comprehensive cultural resources inventory was conducted for Hill AFB buildings exceeding 50 years in age, as well as buildings that were not yet 50 years old but that may be eligible for their role during the Cold War. Four of the 12 buildings proposed for demolition are historic structures, and have been determined eligible for inclusion in the NRHP.

3.4 Physical Environment (Surface Soils)

The surface soils in the vicinity of the 12 proposed demolition sites are flat and covered with structures, pavement, and occasional landscaping.

There is no known shallow soil contamination associated with any of these structures, but two of the sites are IRP deferred sites (e-mail communication, Ms. Shannon Smith). Deferred sites are areas, that based on past practices, could potentially exhibit shallow soil contamination, but it was deemed inappropriate to sample through the floor of the on-site buildings while the buildings were in use.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Air Quality

4.1.1 Impacts of the Proposed Action

The only proposed excavation for the 12 demolition projects would be related to removal of buried petroleum storage tanks and utility lines. Following the removal of footings and foundations, the sites would be backfilled to original grade. For soil compaction reasons, fill material is typically placed at a moisture content of 10 percent or greater. To further control emissions of fugitive dust, the demolition contractor would be required to have a water truck on site as needed during dry and windy weather for the purpose of dust suppression and reducing the emissions of PM-10.

The internal combustion engines of heavy equipment would generate emissions of PM-10, VOCs, NO_x, and CO. Fugitive emissions from demolition activities should be mitigated according to *Utah Administrative Code, Rule R307-205, Emission Standards: Fugitive Emissions and Fugitive Dust*. Good housekeeping practices should be used to maintain opacity at less than 20 percent. Haul roads should be kept wet, and any soil that is deposited on nearby paved roads by vehicles should be removed from the roads and returned to the site or appropriate disposal area.

Assumptions and estimated emissions for the proposed demolition activities are listed in Table 1.

Table 1: Calculated Heavy Equipment Emissions

Building	9	11	308	405	697	752	800	820	830	840	1146	1147	2201
Type of Equipment	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Dump Truck	170	150	**144**	4	**16**	60	2530	880	1520	1520	**80**	**80**	**4**
Loader/Backhoe					**16**								
Track Hoe	140	130	**120**	16		30	1260	440	760	760	**40**	**40**	**16**
Calculated Emissions													
VOC (tons)	0.12	0.11	0.10	0.01	0.01	0.03	1.37	0.48	0.82	0.82	0.04	0.04	0.01
CO (tons)	0.64	0.59	0.55	0.06	0.05	0.16	6.77	2.36	4.08	4.08	0.21	0.21	0.06
NOx (tons)	1.56	1.42	1.33	0.12	0.10	0.42	17.49	6.10	10.53	10.53	0.55	0.55	0.12
PM10 (tons)	0.18	0.16	0.15	0.02	0.01	0.05	1.89	0.66	1.14	1.14	0.06	0.06	0.02
HAPs (tons)	0.03	0.03	0.03	0.00	0.00	0.01	0.37	0.13	0.22	0.22	0.01	0.01	0.00
SOx (tons)	0.14	0.13	0.12	0.01	0.01	0.04	1.57	0.55	0.95	0.95	0.05	0.05	0.01

Source: Personal communication with Yvonne Day, 5/12/05 (bold cells); the remainder were estimated by size comparisons
Source for Emission Factors: EPA Nonroad Engine and Vehicle Emission Study, EPA 460/3-91-02, November, 1991
Note: HAPs are hazardous air pollutants

A detailed asbestos survey would be performed by Hill AFB employees prior to writing the specifications for the demolition contracts. Each asbestos abatement contractor would be verified by Hill AFB project managers as qualified to perform regulated asbestos abatement projects, and both the company and individual workers would possess all required certifications to perform the assigned tasks. Prior to beginning any asbestos abatement efforts, a notification of at least 10 days would be provided to DAQ. Because all work would be performed in accordance with standards set by the US Environmental Protection Agency (EPA) and DAQ, there are no impacts to air quality associated with the asbestos abatement portion of the proposed action.

Related to conformity with Utah's *State Implementation Plan*, and therefore the Clean Air Act's *General Conformity Rule* and 40 CFR 93.154, the each proposed demolition project is expected to require less than six months to complete, and no other air emissions would be created by the proposed action. Therefore, conformity was determined to exist.

4.1.2 Impacts of the No Action Alternative

There would be no air quality impacts associated with the no action alternative.

4.1.3 Cumulative Impacts

Demolition-related air emissions would be temporary. Since each of the 12 separate demolition projects would be most likely be happening at different times, there are no predicted cumulative impacts to air quality associated with operation of the proposed action. There are no cumulative air quality impacts associated with operation of the no action alternative.

4.2 Solid and Hazardous Wastes

4.2.1 Impacts of the Proposed Action

During the proposed demolition activities, a significant volume of demolition debris would be generated, and treated as uncontaminated trash. It is possible that equipment failure or a spill of fuel, lubricants, or demolition-related chemicals could generate solid or hazardous wastes. In such a case, or if excavated soils exhibit suspicious odors or appearance, the following procedures would apply on Hill AFB.

Hill AFB personnel have specified procedures for handling demolition-related solid and hazardous wastes in their engineering construction specifications. The procedures are stated in *Section 01000, General Requirements, Part 1, General, Section 1.24, Environmental Protection.* All solid non-hazardous waste is collected and disposed on a daily basis. Samples from suspect wastes are analyzed for hazardous vs. non-hazardous determination. The suspect waste is safely stored while analytical results are pending. Hazardous wastes are stored at sites operated in accordance with the requirements of 40

CFR 265. The regulations require the generator to characterize hazardous wastes with analyses or process knowledge. Hazardous wastes are eventually labeled, transported, treated, and disposed in accordance with federal and state regulations.

Any friable asbestos detected during the detailed asbestos survey and subsequently removed during an abatement action, would be disposed in accordance with permit requirements at a disposal facility that is approved to accept friable asbestos. Loose flakes of lead-based paint (confirmed to contain lead by on-site inspections using a portable X-ray fluorescence [XRF] analyzer) would be scraped, collected, and properly disposed at a permitted hazardous waste disposal facility. Dielectric fluid from any transformers or light ballasts suspected of containing PCBs would be tested, and the equipment would be properly disposed as either a regulated waste (PCB content of 50 parts per million [ppm] or more) or as uncontaminated trash (PCB content less than 50 ppm).

The uncontaminated demolition debris, non-friable asbestos, and lead-based paint that is still affixed to surfaces, would all be disposed off base, at a local construction debris (Class VI) landfill. Class VI landfills are allowed to accept construction and demolition waste, including: non-friable asbestos; lead-based paint that is still affixed to surfaces; and a quantity of 10 PCB-containing light ballasts per structure.

Thermostats that contain mercury switches would be collected by electricians from the Hill AFB facilities maintenance flight (75 CES/CEZ) prior to demolition activities. Any thermostats not saved for local reuse would be delivered to the Defense Reutilization and Marketing Office (DRMO), which has an office on Hill AFB. DRMO would send the thermostats to be recycled, and a waste stream would not be created.

Any asphalt pavements surrounding the structures would be removed, collected, and would either be recycled, or stored and made available for reuse during future Hill AFB construction projects.

Petroleum storage tank systems would be drained of any remaining fuel, and the fuel would be recycled. The empty tank systems would either be reused, recycled, or properly disposed at a permitted disposal facility.

The potential for contaminated surface soils to create a hazardous waste stream is discussed in Section 4.4.

4.2.2 Impacts of the No Action Alternative

With respect to solid and hazardous wastes, there are no impacts associated with the no action alternative.

4.2.3 Cumulative Impacts

Proper handling of solid and hazardous wastes eliminates releases of contaminants to the environment. There are no cumulative solid or hazardous waste impacts associated with the proposed action. There are no cumulative solid or hazardous waste impacts associated with the no action alternative.

4.3 Cultural Resources

4.3.1 Impacts of the Proposed Action

Buildings 800, 820, 830, and 840 have been determined eligible for inclusion in the NRHP, and demolition is an adverse effect that must be mitigated under Section 106 of the *National Historic Preservation Act*. A memorandum of agreement (MOA) has been signed by Hill AFB and the Utah State Historic Preservation Office (SHPO) to mitigate the adverse effect caused by the demolition of these four structures (Hill AFB 2005c). This agreement stipulates mitigation measures to include: public outreach (update of the Hill AFB website historic buildings interactive map); photographs and drawings; intensive level surveys; and documentation of the affected buildings.

4.3.2 Impacts of the No Action Alternative

With respect to cultural resources, the no action alternative has no impacts.

4.3.3 Cumulative Impacts

There are no cumulative impacts to cultural resources associated with the proposed action or with the no action alternative.

4.4 Physical Environment (Surface Soils)

4.4.1 Impacts of the Proposed Action

Demolition projects can cause soil erosion. Most of the areas of proposed demolition are relatively flat and the potential for erosion is therefore small. Hill AFB construction specifications would mitigate any erosion potential that does exist by requiring the contractors to restore the land to its original condition. The area disturbed by excavation would be backfilled and subsequently re-planted, re-seeded, or sodded to prevent soil erosion. Preventing soil erosion during demolition activities is also required to comply with stormwater pollution prevention rules. For each demolition that would disturb at

least one acre (Buildings 800, 820, 830, and 840), a stormwater pollution prevention plan would be prepared and implemented prior to initiating any site-disturbing activities.

As stated in Section 3.4, two of the proposed demolition sites are IRP deferred sites, which could potentially exhibit shallow soil contamination. At these two locations (Buildings 752, and 800), soil samples would be collected beneath and surrounding the structures (e-mail communication from Shannon Smith) either as part of or immediately following the demolition projects. Based on analytical laboratory results, any soil materials identified as being contaminated would be handled by existing Hill AFB policies and procedures, as discussed in Section 4.2.1.

For the four proposed demolition sites with petroleum storage tanks, three of the tanks contained liquids, and these sites could potentially exhibit shallow soil contamination (the above-ground storage tank [AST] at Building 405 contained propane, which would have evaporated if the tank had leaked). At Building 9, an AST containing diesel fuel is present. At Building 752, an underground storage tank (UST) containing heating oil is present. At Building 800, an AST containing diesel fuel is present. At these three locations, soil samples would be collected beneath and surrounding the removed tank systems, either as part of or immediately following the demolition projects. Based on analytical laboratory results, any soil materials identified as being contaminated would be handled by existing Hill AFB policies and procedures, as discussed in Section 4.2.1.

4.4.2 Impacts of the No Action Alternative

With respect to surface soils, the no action alternative has no impacts.

4.4.3 Cumulative Impacts

There are no cumulative impacts to surface soils associated with the proposed action or with the no action alternative.

4.5 Summary of Impacts

The proposed action and the no action alternative were both considered in detail. Following the demolition phase, backfill and revegetation operations would prevent erosion of the site. The proposed action could be implemented with minor air emissions of short term duration. During demolition activities, solid wastes and wastes containing asbestos, lead-based paint, PCBs, mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly. The proposed demolition projects would have an adverse effect on cultural resources, but mitigation efforts would be conducted according to an existing MOA with the Utah SHPO. No long-term environmental impacts are expected from either the proposed action or the no action alternative.

Table 2: Summary Comparison of Alternatives

Issue	**Proposed Action** **Demolish 12 Structures at Hill AFB**	**No Action** **Do Not Demolish the Structures**
Air Quality	Temporary demolition-related emissions. Asbestos abatement would be performed wherever indicated.	No impact.
Solid and Hazardous Wastes	Solid wastes and wastes containing asbestos, lead-based paint, PCBs, mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly.	Opportunities to remove hazardous building components would not be realized.
Cultural Resources	For four structures, mitigation efforts would be conducted according to an existing MOA with the Utah SHPO.	No impact.
Surface Soils	Demolition-related erosion control measures and stormwater permits may be required - the potential for shallow soil contamination at three sites would be investigated, and remediated if necessary.	Opportunities to investigate potentially contaminated shallow soils would not be realized.

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7.0 REFERENCES

CFR: *Code of Federal Regulations*, US Government Printing Office, Office of the Federal Register (various sections and dates).

DAQ 2003: *State of Utah National Ambient Air Quality Standards, Areas of Non-Attainment and Maintenance (Effective May, 1999)*, Utah Division of Air Quality Website, www.airquality.utah.gov/GRAPHICS/MAPS/non_attn.pdf.

EPA 1991: *Nonroad Engine and Vehicle Emission Study - Report*, Table 2-07a, US Environmental Protection Agency, 1991.

Hill AFB: *Construction Specifications, Section 01000, General Requirements, Part 1, General, Section 1.24, Environmental Protection*, Hill AFB, UT, current version.

Hill AFB 2005a: *Land Management (Web Page)* http://www.em.hill.af.mil/conservation/natural/landm.htm.

Hill AFB 2005b: *Fish & Wildlife Management At Hill Air Force Base (Web Page)* http://www.em.hill.af.mil/conservation/natural/fishwild.htm.

Hill AFB 2005c: *Memorandum of Agreement Between the United States Air Force and the Utah State Historic Preservation Officer Pursuant to 36 CFR Section 800 Regarding the Demolition of Five 800-Zone Historic Buildings, Hill Air Force Base, Utah*, 2005.

UAC: *Utah Administrative Code*, State of Utah, (various sections and dates).

FINDING OF NO SIGNIFICANT IMPACT

1. NAME OF ACTION: Demolish 12 structures at Hill Air Force Base (AFB), Utah.

2. DESCRIPTION OF THE PROPOSED ACTION: Hill AFB proposes to accommodate current United States Air Force (USAF) missions by demolishing 12 structures at Hill AFB. All 12 buildings have both aged and deteriorated to the point they cannot be economically repaired or remodeled.

The proposed action includes all work necessary to demolish 12 structures at Hill AFB.

The proposed demolition activities would include: demolishing the structures; removing any asbestos and/or lead based paint that is present; removing slabs, foundations, and footings; removing any petroleum storage tanks associated with the structures; removing and capping buried utilities backfilling to original grade; and restoring vegetation to prevent future erosion.

3. SELECTION CRITERIA: The following criteria were used to assemble alternatives. The action to be taken should:

- support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services;
- not violate any provisions of the *National Historic Preservation Act* ; and
- be protective of facilities, human health, and the environment.

4. ALTERNATIVES CONSIDERED OTHER THAN THE PROPOSED ACTION:

Under the no action alternative, 12 structures that are no longer able to support USAF mission requirements would continue to occupy accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed. The no action alternative does not meet the selection criteria to support Hill AFB's mission to overhaul, repair, and test: aircraft, missiles, and munitions for USAF and other Department of Defense services; or to be protective of human health.

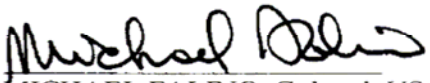
5. SUMMARY OF ANTICIPATED ENVIRONMENTAL EFFECTS:

a. Proposed Action: This alternative fully satisfies all applicable regulations and provides for accomplishment of mission objectives without significant impacts to human health or the environment. The proposed action could be implemented with minor environmental impacts. Following the demolition phase, backfill and revegetation operations would prevent erosion of the site. The proposed action could be implemented with minor air emissions of short term duration. During demolition activities, solid wastes and wastes containing asbestos, lead-based paint, PCBs, mercury, asphalt, petroleum products, and any contaminated soils would all be stored, transported, disposed, and/or recycled properly. The proposed demolition projects would have an

adverse effect on cultural resources, but mitigation efforts would be conducted according to an existing memorandum of agreement (MOA) with the Utah State Historic Preservation Office (SHPO). No adverse cumulative environmental impacts are expected.

b. No Action Alternative: Under the no action alternative, current conditions would continue. Opportunities to remove hazardous building components and investigate potentially contaminated shallow soils would not be realized. Under the no action alternative, structures that are no longer able to support USAF mission requirements would continue to occupy accessible building sites on Hill AFB where future industrial, administrative, and storage activities might be housed.

6. FINDING OF NO SIGNIFICANT IMPACT: Based on the above considerations, a Finding of No Significant Impact (FONSI) is appropriate for this assessment.

Approved by: 
MICHAEL FALINO, Colonel, USAF
Commander

Date: 26 Jul 05